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Remarks/Arguments

Claims 1-6 have been amended. Claims 1-6 are pending. Applicants have amended the claims to clarify the claim language. No new matter has been added to the prosecution of this application. For at least the reasons stated below, Applicants assert that the claims are now in condition for allowance.

1. The Claim Objections and Section 112 Rejections have been Addressed.

The claims are objected to and/or rejected by the Examiner in sections 2, 3 and 4 of the Office Action. The claims have been amended to overcome all but two of the listed items in sections 2 and 4 of the Office Action.

As for the first item that was not changed, the Examiner states in section 2 of the Office Action:

"Claim 3 recites 'at least one of the one or more predefined system constraints' on L. 2-3, which has antecedent basis. The Examiner assumes that 'at least one of the one or more predefined system constraints' on L. 3 refers back to 'one or more predefined system constraints' on L. 18 of claim 1 and suggests the following correction: 'the one or more'."

Applicants assume that the Examiner really meant to say "which lacks antecedent basis" instead of "which has antecedent basis".

Applicants agree that L. 18 of claim 1 introduces the term "one or more predefined system constraints". Claim 3 requires that at least one of these system constraints are based on the cumulative contributions for each component/subsystem. Thus claim 3 allows for the possibility that not all of the "one or more predefined system constraints" will be based on the cumulative contributions, but may be based on some other criteria. As the term "one or more predefined system constraints" is properly introduced in claim 1,

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Applicants submit that it is proper for claim 3 to require "at least one of the one or more predefined system constraints" because the previously introduced term "one or more predefined system constraints" is preceded by the word "the".

As for the second item that was not changed, the Examiner states in section 4 of the Office Action:

"Claim 6 recites 'at least one of the one or more predefined system constraints' on L. 2-3, which has antecedent basis. The Examiner assumes that 'at least one of the one or more predefined system constraints' on L. 3 refers back to 'one or more predefined system constraints' on L. 18 of claim 1 and suggests the following correction: 'the one or more'."

Here again Applicants assume that the Examiner really meant to say "which lacks antecedent basis" instead of "which has antecedent basis".

Applicants respectfully point out that claim 6 depends from claim 4 instead of claim 1 and therefore claim 6 cannot refer back to a phrase in claim 1. Rather, as amended the term "one or more predefined system constraints" is introduced at the end of claim 4. Thus, Applicants submit that it is proper for claim 6 to require "at least one of the one or more predefined system constraints" because the previously introduced term "one or more predefined system constraints" is preceded by the word "the".

2. The Section 102 Rejections Should be Withdrawn.

Claims 1-6 are rejected under 35 U.S.C. § 102(e) as being anticipated by Weinberg (US Patent #6,144,962). Specifically, the Examiner states for claim 1 that Weinberg teaches elements (a) through (d) in the following locations: Fig. 17; Fig. 20; Col 3 L. 9-63; Col 27 L. 1-13; and Col 27 L. 57 – Col 28 L. 65.

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The Examiner also states that for claim 1 Weinberg teaches elements (e) and (f) in the following locations: Fig.17; Col 1 L. 34-40; and Col 27 L. 57 – Col 28 L. 65.

A. Applicants' invention and the Weinberg Invention are in Entirely Different Fields

One embodiment of the Applicants' invention broadly may be regarded as a tool for use by engineers as they design a new electrical system, such as for an integrated circuit board. The engineer may draft a block diagram of a system. The engineer may then wish to find out which components for a first block in the block diagram and which components for a second block in the block diagram could be used together. The invention may query a database of parts to come up with a list of components that are possible candidates for the first block as well as a list of components that are possible candidates for the second block. Then the invention may test various combinations of these two sets of candidates to determine which combinations fulfill a set of system constraints. One such constraint may be the total cost for the components. For example, if the system is constrained such that the total price must be \$10 or less, the invention must find combinations of components such that if the component for the first block costs \$8, then the component for the second block must cost \$2 or less.

This process of finding components that match requirements for blocks in block diagrams and furthermore finding combinations of these components that fit within cost and other predefined constraints is known as the discovery phase. Historically discovery has been very difficult to perform due to the large number of components on the market.

The Weinberg invention is not in the field of engineering discovery. Rather, Weinberg provides a system for visualizing web sites and their content. One skilled in the art of engineering discovery would not search the field of website visualization for answers to problems in the field of discovery.

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B. The Weinberg Invention.

Under a 102 rejection, the cited reference must teach each and every element in the claim. A reading of the portions of Weinberg used by the Examiner to support his 102 rejection show that the Weinberg invention does not teach the elements of claim 1. First, each of the cited portions in Weinberg will be summarized:

(1) Fig. 17:

Figure 17 shows a flowchart regarding the steps involved in applying a filter. First all nodes and links are set to "hidden" status. Then each node (i.e., URL) is tested and if it satisfies a filter then it is set to "visible" status and changed to a highlighted color. Finally, all nodes that are still "hidden" but are need to maintain connections to the home page are set to "visible" status.

(2) Fig. 20:

Figure 20 shows a flowchart regarding the steps involved in processing a log file to determine the activity level of links. First the next line of a log file is read. If the user hasn't previously visited the website then flow returns to the top of the flowchart and the next line of the log file is read. Otherwise, if a link exists between the current URL and the prior URL, a "HITS" counter is incremented for the link.

(3) Col 3 L. 9-63 "In accordance ... a Web site":

Software process a web site's log file to generate usage data. For example, usage data may include the number of "hits" for each hyperlink. Preferably, the usage data is generated on a per-visitor basis in order to determine the navigation path taken by a visitor to the web site. The usage data is superimposed over a map of the web

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site using different colors, which allows a webmaster to detect congested links, popular web pages, etc.

In another aspect, the invention scans and maps dynamically-generated web pages by first capturing and recording data entered by the user in a web form, and then re-submitting that data when the web site is later scanned. The invention's capture session feature records any web pages retrieved by the browser and any data entered in web forms. Also the output of a web browser can be captured to evaluate the web site.

(4) Col 27 L. 1-13 "As generally ... non-OK URLs":

As shown in Figure 16, a "filtered map" has components of a regular map of a web site, the URLs that satisfy a filter, links to those URLs that satisfy a filter, and intermediate nodes or links that are needed to maintain connectivity. Thus, the filtered map includes the home page URL, and all URLs whose scanning status is something other than "OK".

(5) Col 27 L. 57 - Col 28 L. 65 "By way of ... view of the map":

Standard web servers maintain log files. Each log file entry represents an access to the website by a visitor and includes various information about that event, such as path to the URL, a user ID, and date/time of the access. The invention uses the info in the log file in combination with a graph of the web site to determine probable paths taken by web visitors. Generally this means that the date/time stamps in the log file are used to determine the ordered progression of a visitor through a web site using the link information to determine the probable path taken by the visitor, including the web site entry, web site exit, and all

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links accessed by that visitor. By analyzing each visitor in the log file, the invention may generate statistical data for each link and node of the website and attach it to a graph of the website. The Action Tracker feature of the software allows the retrieval of one of these log files. Figure 19 shows how the Action Tracker software displays activity levels of the site's links through the use of color-coding to show three different levels of user activity. Only the links are displayed on the Action Tracker display that satisfy a user-adjustable minimum activity threshold. Each visible link also shows the total number of hits from the log file.

(6) Col 1 L. 34-40 "Company webmasters ... congested links":

Webmasters must identify and repair broken links in a website, monitor changing web site content and detect/manage congested links in the web site.

C. Comparing Weinberg to Claim 1

The preamble to claim 1 recites: "A method for choosing components or subsystems for a plurality of generic descriptions in a system design in compliance with one or more system constraints, wherein the generic descriptions represent the components or subsystems in the system design, the method comprising:". No where in the cited portions of Weinberg is there a teaching or suggestion that Weinberg chooses components for a generic description in a system design. At most, Weinberg analyzes a web site map and a web site log file. Nothing in the web site map or log file is a "generic description" for which components or subsystems are chosen.

Clause (a) in claim 1 recites: "choosing a first generic description and a second

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generic description from the plurality of generic descriptions;". Again, Weinberg has no teaching or suggestion about "generic descriptions" in a system design. At most, Weinberg teaches URL nodes that make up a map of a web site. However, such known URL nodes are not "generic descriptions" for which components or subsystems must be chosen to replace.

Clause (b) in claim 1 recites: "querying a database of objects for finding potential components or subsystems for the first generic description;". Nowhere in Weinberg is there a teaching or suggestion of leveraging a database for finding components or subsystems that can be used to replace a first generic description. At most, Weinberg uses a log file to track visitors to a web site.

Clause (c) in claim 1 recites: "receiving a first answer set from the database of objects, where the first answer set is comprised of at least one component or subsystem candidate for the first generic description;". Weinberg does not teach receiving such an answer set of components that can be used to represent the first generic description of a system design.

Clause (d) in claim 1 recites: "querying the database of objects for finding potential components or subsystems for the second generic description;". Nowhere in Weinberg is there a teaching or suggestion of leveraging a database for finding components or subsystems that can be used to replace a second generic description. At most, Weinberg uses a log file to track visitors to a web site.

Clause (e) in claim 1 recites: "receiving a second answer set from the database of objects, where the second answer set is comprised of at least one component or subsystem candidate for the second generic description;". Weinberg does not teach receiving such an answer set of components that can be used to represent the second generic description of a system design.

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Clause (f) in claim 1 recites: "testing one or more combinations of the component or subsystem candidates from the first and second answer sets against one or more predefined system constraints; and". Weinberg does not teach creating various combinations of components or subsystems that were retrieved from the database and then testing those various combinations against predefined system constraints. At most, Weinberg teaches setting predefined thresholds so that the map can display three activity levels using three different colors, or displaying a map based on filtered results (where filtering allows only certain node URLs to be visible on the map).

Clause (g) in claim 1 recites: "determining at least one solution set, where each solution set is one of the combinations of the component or subsystem candidates which best complies with the one or more predefined system constraints". Weinberg does not teach deciding which of the combinations of components that can represent the 2 generic descriptions that best comply with the defined constraints.

Thus, comparing the cited portions of Weinberg to claim 1, Applications respectfully submit that Weinberg does not teach each and every element of the claim and therefore request that the rejection be withdrawn.

Claims 2 and 3 depend from claim 1 and therefore Weinberg fails to teach each and every element of these claims. Therefore Applicants request that the rejection be withdrawn.

While claim 4 is an Independent claim, it shares with claim 1 several restrictions, such as: the requirements of generic descriptions that represent components or subsystems in a system, querying a database to find sets of components/subsystems that are candidates for the two generic description, and testing a first and second candidate to see if they can not only be used to replace the two generic descriptions but also comply with certain system constraints. As Weinberg does not teach any of these restrictions,

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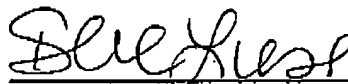
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Applicants submit that it fails to teach each and every element of claims 4, 5 and 6 and therefore request that those rejections be withdrawn.

3. Summary

The reference does not teach each of the limitations of the claims and therefore Applicants submit that all pending claims are allowable over the art of record and respectfully request that a Notice of Allowance be issued in this case. In the event a telephone conversation would expedite the prosecution of this application, the Examiner may reach the undersigned at 612-607-7508. If any fees are due in connection with the filing of this paper, then the Commissioner is authorized to charge such fees including fees for any extension of time, to Deposit Account No. 50-1901 (Docket 20528-13).

Respectfully submitted,



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